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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,166	09/19/2001	Su Hyun Park	HI-033	8321
34610	7590	04/25/2005	EXAMINER	
FLESHNER & KIM, LLP			HOOSAIN, ALLAN	
P.O. BOX 221200			ART UNIT	
CHANTILLY, VA 20153			PAPER NUMBER	

2645

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/955,166

Applicant(s)

PARK, SU HYUN

Examiner

Allan Hoosain

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-9 and 11-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-9 and 11-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6-9, 11-27 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by **Spartz et al.** (US 5,878,036).

As to Claims 1,6, with respect to Figures 1 and 6, **Spartz** teaches a method of reporting an assignment completion (changed service option) in a mobile communication system, comprising:

transmitting a message type (Col. 14, lines 12-14),

a channel number representing a communication path being used (Col. 14, lines 18-35),

encryption information (Col. 15, lines 48-55), and

contents of the changed service option from a base station/base station controller

(BS/BSC) to a mobile switching center after a service re-negotiation procedure is performed between a mobile station and the BS/BSC (Figure 6 and Col. 16, lines 46-65, Col. 17, lines 10-18);

wherein the service re-negotiation procedure occurs after the mobile switching center has been notified about an initially negotiated service option, and after the mobile station, the

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BS/BSC and the mobile switching center has entered into a busy state using the initially negotiated service option (Col. 16, lines 30-32, 55-65; Col. 17, lines 1-7 and Col. 20, lines 3-31), and during soft handoffs (an existing call) (Col. 11, lines 13-40 and Figure 5).

As to Claim 2, **Spartz** teaches the method of claim 1, wherein the message type, channel number, encryption information and contents of the changed service option are part of an assignment complete message (Col. 17, lines 10-18).

As to Claims 3,8, **Spartz** teaches the method of claim 1, wherein the contents of the changed service option are transmitted as a service option list, and wherein the service option list comprises a service option list Information Element Identifier (IEI) field for simultaneously supporting at least one or more services, a length field for indicating a length of transmitted information, a number of service options field for indicating a number of services changed as a result of the re-negotiation, a service option Identifier (SOI) field for identifying the changed service, and a service option (i) field for indicating the changed information.

As to Claims 4,9, **Spartz** teaches the method of claim 3, wherein if the number of the changed service options is one or more, each of the SOI information field and the changed service option field are repeated as many as the number of the changed service options.

As to Claim 7, **Spartz** teaches the method of Claim 6, wherein the transmissions form subsystem complete messages (a Service Option Report Message) (Col. 15, line 64 through Col. 16, line 6).

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As to Claims 11,18,27, with respect to Figures 1 and 6, **Spartz** teaches a method of reporting a service option changed through a service option re-negotiation between a mobile station and a base station /base station controller in a mobile communication system, comprising:

reporting the changed service option to a mobile switching center using one of an assignment completion message and a service option report message (Col. 17, lines 10-18),

wherein each of the assignment completion message and the service option report message includes a service option list field indicating the changed options (Col. 17, lines 1-5);

wherein the service option re-negotiation occurs after the mobile station has entered a busy state using an initially negotiated service option (Col. 16, lines 30-32, 55-65; Col. 17, lines 1-7 and Col. 20, lines 3-31),

and during soft handoffs (an existing call) (Col. 11, lines 13-40 and Figure 5).

As to Claims 12,19, **Spartz** teaches the method of claim 11, wherein if at least one service option is changed while all other services are maintained as a result of the service option re-negotiation, the contents of the service re-negotiation between the mobile station and the base station/base station controller are reported to the mobile switching center using, one of the assignment completion message and the service option report message (Col. 17, lines 10-18).

As to Claim 13, **Spartz** teaches the method of claim 11, wherein if a portion of services in progress is to be released and a service option of a non -released service is changed as a result of the service option re-negotiation, the changed service option is reported to the mobile switching

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center using one of the assignment completion message or the service option report message, and a service release procedure is performed with respect to the released service using a service release message and a service release completion message (Col. 15, lines 48-65).

As to Claim 14, **Spartz** teaches the method of claim 11, wherein if a portion of the services in progress is to be released and non-released services are not to be changed as a result of the service option re-negotiation, a service release procedure is performed with respect to the released service using a service release message and a service release completion message (Col. 16, lines 22-35).

As to Claim 15, **Spartz** teaches the method of claim 11, wherein if all services in progress are to be released as a result of the service option re-negotiation, a call release procedure among the mobile station, base station /base station controller, and mobile switching center is performed (Col. 17, lines 1-10).

As to Claims 16,21,24, **Spartz** teaches the method of claim 11, wherein the service option list field comprises:

- an assignment request (service option list Information Element Identifier (IEI)), to identify services provided;
- a time slot (length field), to a length of transmitted information;
- a channel type (number of service options field), to indicate the number of services changed as a result of negotiation,

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a service request (service connection identifier (SOCI) field), to identify the changed service; and

a variable rate transmission (service option field), to indicate the corresponding service information (Col. 16, lines 40-65).

As to Claims 17,22,26, **Spartz** teaches the method of claim 16, wherein if the number of the change is one or more, each of the SOCI information field and the changed service option field are repeated as many as the number of the changed service options (Col. 16, lines 30-39).

As to Claim 20, **Spartz** teaches the method of claim 19, wherein the assignment complete message further comprises a channel number field, and encryption information field, and a service option field (Col. 15, lines 25-29,41-47 and Col. 16, lines 30-32).

As to Claim 23, **Spartz** teaches the method of claim 19, wherein the service option report message contains no additional fields (Col. 16, lines 32-42).

As to Claim 25, **Spartz** teaches the message of claim 24, wherein the service option list (IEL) permits the communications system to simultaneously support at least two services (Col. 16, lines 42-46).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 6 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by **Krishnamurthi et al.** (US 6,134,434).

As to Claim 6, with respect to Figures 3-4, **Krishnamurthi** teaches a method of reporting a changed service option in a mobile communication system, comprising:

transmitting a message type and contents of a changed service option from a base station/base station controller (BS/BSC) to a mobile switching center after a service re-negotiation procedure is performed between a mobile station and the BS/BSC (Figure 3, labels 102-103),

wherein the service re-negotiation procedure occurs after the mobile switching center has been notified about the initially negotiated service option, after the mobile station has entered into a busy state using the initially negotiated service option, and during an existing call (Figure 3).

As to Claim 18, with respect to Figures 3-4, **Krishnamurthi** teaches a method of reporting a changed service option in a mobile communication system, comprising:

performing a service re-negotiation procedure between a mobile station and a base station (Figure 3, labels 112-108); and



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transmitting a reporting message from the base station to a mobile switching center indicating an outcome of the service re-negotiation (Figure 3, labels 108-102),

wherein the reporting message comprises a service request (message type field) and a service configuration (service option list field) (Figure 3), and

wherein the service re-negotiation procedure occurs after the base station has notified the mobile switching center about an initially negotiated service option, after billing information has been collected regarding the initially negotiated service option (Col. 6, lines 1-20), and

during a soft handoff (current call) corresponding to the initially negotiated service option (Figure 3 and Col. 6, lines 20-32).

### ***Response to Arguments***

5. Applicant's arguments filed in the 1/28/05 Remarks have been fully considered but they moot in view of the new grounds of rejection and the following:

Upon further review of **Spartz**, Examiner found that **Spartz** teaches soft handoffs where services are re-negotiated during a call. Therefore, the current amendments do not overcome **Spartz** as indicated in the instant Office Action. In addition, Cited prior art **Krishnamurthi** teaches soft handoffs as applied to claims 6 and 18

Examiner respectfully invites Applicant to contact Examiner to discuss possible amendments for overcoming the prior art of record.

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***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Soliman** (US 6,321,090) teaches service re-negotiation during handoffs between base stations.

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231  
**or faxed to:**

(703) 872-9314, (for formal communications intended for entry)

**Or:**


(703) 306-0377 (for customer service assistance)

Hand-delivered responses should be brought to Carlyle, Alexandria, VA 22313  
(Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Allan Hoosain** whose telephone number is (571) 272-7543. The examiner can normally be reached on Monday to Friday from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Fan Tsang**, can be reached on (571) 272-7547.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

  
**Allan Hoosain**  
**Primary Examiner**  
4/8/05